Table S1 Newcastle-Ottawa scale score of the reviewed non-randomized studies

Study	Selection (4 stars)				Comparability (2 stars)	Outcome (3 stars)			Total score
	Representativeness score of the efficiency and safety of single use ureteroscopy	Selection of the efficiency and safety of single use ureteroscopy	Ascertainment of efficiency and safety of single use ureteroscopy	Demonstration that outcome of interest was not present at start of study	Comparability of cohorts based on the design or analysis	Assessment of outcome	Was follow up long enough for outcomes to occur?	Adequacy of follow up of cohort	
R. Mager 2018	★	★	★	★	★	★	–	–	6
Manint Usawachintachit 2017	★	★	★	★	★	★	–	★	7
Jonathan Kam 2019	★	★	★	★	★	–	–	–	5
José A. Salvadó 2019	★	★	★	★	★	★	–	★	7

Table S2 Jadad score of the reviewed RCT.

Study	Design	Randomization	Double blinding	Follow-up	Total points/rank
Jie Ding	RCT	2	1	1	4/High
Shiyong Qi	RCT	2	1	1	4/High

Table S3 Sensitivity analysis of efficiency meta-analysis. CI: Confidence interval.

Study omitted	Estimate	95% CI	
Jie Ding (2015)	1.07	0.99	1.17
Shiyong Qi (2019)	0.99	0.94	1.06
José A. Salvadó (2019)	1.01	0.95	1.07
R. Mager (2018)	1.01	0.95	1.07
Manint Usawachintachit (2017)	0.99	0.94	1.05
Jonathan Kam (2019)	1.02	0.95	1.09

Table S4 Sensitivity analysis of safety meta-analysis. CI: Confidence interval.

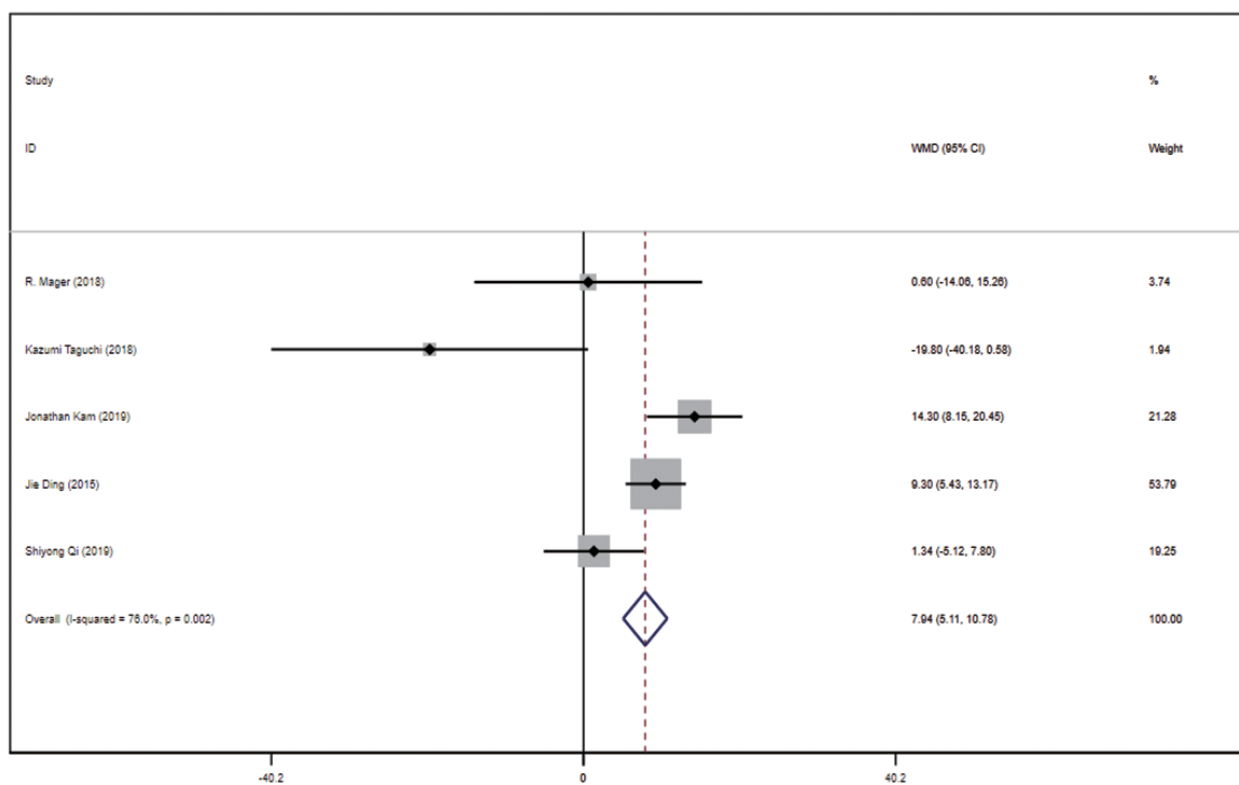| Study omitted	Estimate	95% CI	
R. Mager (2018)	1.20	0.87	1.65
Manint Usawachintachit (2017)	1.46	1.06	2.03
Jonathan Kam (2019)	1.34	0.95	1.90
Jie Ding (2015)	1.19	0.78	1.82
Shiyong Qi (2019)	1.27	0.93	1.72

Figure S1 Funnel plot of operation time comparison between single-use ureteroscope and reusable ureteroscope.